



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,646	06/05/2006	Coen Liedenbaum	FR040119	5406
24737 7590 08/28/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER BOUTSIKARIS, LEONIDAS	
			ART UNIT 2872	PAPER NUMBER
			MAIL DATE 08/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/581,646

Applicant(s)

LIEDENBAUM, COEN

Examiner

Leo Boutsikaris

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/5/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

Claims 1-4 are objected to because of the following informalities:

In claim 1, line 5, the word "which" should be changed to "whose", for better clarity.

Claims 2-4 inherit the deficiency of claim 1 from which they depend.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (US 2003/0223101) in view of Berge (US 6,369,954).

Regarding claim 1, Curtis discloses an optical holographic system (Fig. 3) for recording and reading holographic data, recorded in a holographic medium 314, comprising means for

Art Unit: 2872

receiving the holographic medium 314 (inherent), means for imaging the holographic data page in the form of lens 312, means for detecting the imaged data page in the form of optical detector 320, and a lens 316 located between the receiving means and the detecting means, wherein the focal length of the lens 316 is controllably variable ([0046]-[0049]). It is noted that variation of the focal length of lens 316 necessarily causes variation of the magnification of the optical system comprising lens 316 and lens 318. This can be seen in Figs. 2a and 2b of the present application, wherein change in the focal length of the variable lens 201 causes change in the magnification of the lens system 200 (comprising first variable lens 201 and second fixed lens 202).

However, Curtis does not specify the type of the variable focal length lens 316. Berge discloses an electro-optic variable focal length lens (Fig. 1), whose focal length varies based on an applied voltage (lines 3-38, col. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electro-optic variable focal length lens, taught by Berge, as the variable focal length lens 316 in Curtis's holographic system, since precise controlling of the applied voltage across the electro-optic lens allows for more accurate and fine changes in the focal length of the lens.

Regarding claim 2, the variable focal length lens of Berge is an electrowetting device (lines 32-39, col. 3 in Berge).

Regarding claim 3, the device of Berge comprises a fluid chamber 12, two different fluids 11 and 13 separated by a meniscus (see dark solid line A or line B) of which an edge is constrained by the fluid chamber (at the bottom thereof), a first electrowetting electrode 35 arranged to act on a first side of the edge, a second electrowetting electrode 36 arranged to act

Art Unit: 2872

separately on a second side of the edge and voltage control means for providing a different voltage to the first and second electrowetting electrodes (Fig. 3, lines 21-43, col. 4).

Claims 1, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (US 2003/0223101) in view of Popovich (US 6,356,366).

Regarding claim 1, Curtis discloses an optical holographic system (Fig. 3) for recording and reading holographic data, recorded in a holographic medium 314, comprising means for receiving the holographic medium 314 (inherent), means for imaging the holographic data page in the form of lens 312, means for detecting the imaged data page in the form of optical detector 320, and a lens 316 located between the receiving means and the detecting means, wherein the focal length of the lens 316 is controllably variable ([0046]-[0049]). It is noted that variation of the focal length of lens 316 necessarily causes variation of the magnification of the optical system comprising lens 316 and lens 318. This can be seen in Figs. 2a and 2b of the present application, wherein change in the focal length of the variable lens 201 causes change in the magnification of the lens system 200 (comprising first variable lens 201 and second fixed lens 202).

However, Curtis does not specify the type of the variable focal length lens 316. Popovich discloses an electro-optic variable focal length lens 10 (Fig. 1), whose focal length varies based on an applied voltage (lines 32-45, col. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electro-optic variable focal length lens, taught by Popovich, as the variable focal length lens 316 in Curtis's holographic system, since

Art Unit: 2872

precise controlling of the applied voltage across the electro-optic lens allows for more accurate and fine changes in the focal length of the lens.

Regarding claim 4, the variable focal length lens of Popovich is a liquid crystal device (lines 50-67, col. 3).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Leo Boutsikaris whose telephone number is 571-272-2308. The examiner can normally be reached on M-F, 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEONIDAS BOUTSIKARIS  
PRIMARY EXAMINER



Leo Boutsikaris, Ph.D., Esq.  
Primary Patent Examiner, AU 2872  
August 22, 2007